seeds is dry and cool to keep the seed from drawing in moisture. Leek seeds do not have a long storage

life and therefore may not keep for longer than 2 years.

**Negative selection:** Leeks lend themselves easily for negative selection. Instead of positively selecting the best specimens one rogues out approximately 10 - 20 % the weakest and not true to type plants including any damaged and poor looking plants. There is no transplanting to be done. Even a section of a larger leek crop can be put aside to go to seed. The crop remains in-situ for flowering and seeding.

Negative selection gives **standard seed** which is what is usually sold in seed packets.

\*Cage system. It is possible to grow several leek seed crops in close proximity by erecting a cage over the crop. Fine environ mesh is used for the cage and bumble bee hives or blow flies are placed in the cage and are used to pollinate the crop. It is important to ensure no other flying insects can get in, checking that the netting is secure all round, as this will otherwise cause cross pollination of pure line varieties.

There approximately 400 seeds to the gram.

A leek seed crop can yield between 40 - 60 grams of seed pr sq meter depending on variety.

For more in detail information see also: The Organic Seed Grower by John Navazio. ISBN 978-1-933392-77-6

## \*\*Seed cooperative

www.seedcooperative.org.uk

To support the seed cooperative become a share owning member. Minimum shares are 100 at £ 1 pr share.

We are looking for certified organic growers to join our seed grower's network. Please contact us at,

info@seedcooperative.org.uk



www.open-pollinated-seeds.org.uk

## **Growing leeks for seed**





## Using open pollinated varieties

Leeks: Allium ampeloprasum var. porrum. The leek has its origin around the Mediterranean countries and North Africa where it had descended from its wild ancestors. It was widely cultivated and bred already in ancient Egyptian times. Both the Greeks and Romans were partial to the leek and it has been said that it was the romans who first brought it to Britain and that after the 7<sup>th</sup> century it became the national symbol of wales. Some pound coins pictures the leek. It is in the family with the Middle Eastern cultivated Kurrat which is a smaller version of the leek.

**Flower biology:** Leeks are perfect flower plants which carry stigmas and pollen in the same flower. The flowers are light purple in colour and the flowering will produce clusters of 6 triangular seeds in-cased within the florets.

Pollination: Leeks are cross and insect pollinated and will cross with elephant garlic, kurrat and other leek varieties. They may also self fertilise but they won't cross with onion. They are biennial flowering in their second year. Isolation distance. Ideally a distance of up to 1600 meters should be observed between two different flowering leek crops. However in more sheltered areas with hedges, trees and other barriers, a shorter distance of 800 meters can be used. Using cage systems\* allows for more than one crop to be grown in close proximity.

Minimum number of plants. It is important to maintain the genetic diversity of the many different traits of leeks. But a minimum of 20 plants for home grown situations is to be recommended. For professional seed growing 100 plus plants would be best, however, the more the better.

Crop characteristics: It is important to know the crop characteristics of the leek variety you intend to save from seed, such as leaf colour, leaf stand, width and length of shank. These characteristics need to be considered when selecting within the crop. A lighter green leaf colour usually is associated with an autumn variety.

Remember you can-not save seed successfully from F1 hybrids to give you 'true to type' leeks.

**Agronomy.** (Year 1) Good seed depend on good crop production and good crop production depends on suitable soil and soil preparation. Leeks are a fairly easy crop to grow also for seed and are quite hardy. Raise the crop as one would do a production crop and keep it weed free.

**Positive selection;** (year 1) Depending on whether your crop is an autumn or winter variety, at onset of harvest positively select your best and most true to type leeks by placing 4 ft canes by each plant

Outdoors: For outdoor seed harvest decide how many plants you intend to keep for seed. Usually planting distance of seed plants is 30 cm distance between plants in the row and 60 – 75 cm between rows. From this you can work out plants pr sq meter. Then earmark and prepare an area for transplanting your selected crop. The transplanting may only happen late in the season or late winter for example depending on climate and variety as you may be selecting for cold hardiness in winter leeks. Aim to have harvested between 5 - 10 % of your entire leek crop for seed.

**Elite seeds** are seeds from positively selected plants and should be used for elite seed or standard seed production.

**Indoors:** The leek crop can also be planted into a greenhouse or polytunnel planting at 20 - 30 cm between plants and 45 cm between rows

The non-selected or 90 % of the leek crop can be lifted and sold for the fresh market.

## **Crop support:**

Once you have all the plants in place with the shoots growing and the first flowers appearing, it is advisable to support them by placing single canes for each plant. Alternatively support the plants with 5ft stakes at each end of the bed and place 5ft canes at 6 ft intervals in the row. Then tie several rows of string along the outside of the crop to keep stems in and supported.

**Rouging**: Any plants which fail to grow well, which look weak or bolt too early should be pulled out and discarded **before flowering**. This is called rouging.

Flowering and Seed harvest: During the summer the crop will continue to flower. The leek flowers later than onions producing usually just one seed head and will take longer to mature delaying harvest till September.

Once around 60 % of seed heads have matured manual harvesting can take place over several weeks cutting the entire plant with 30-45 cm of stem to allow the sap to continue to ripen the seeds. Lay seed heads to dry on drying frames in a well aired space and turn the stems every few days. An indication of seed maturity can be seen by seeds turning black.

**Threshing\*\*:** This can be done by hand by rubbing the seed heads gently and sieving out the stemmy material.

Make sure to **label clearly** the cleaned seeds, storing the seeds in paper bags.

Seeds are mostly dry matter of up to around 85 %. It is therefore important that the **storage** of